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ABSTRACT

Historically, kindergartens began as full-day programs, but during World War II the shortage of teachers and building space and the increased birth rate produced a cutback to half-day kindergartens. Full-day kindergartens surfaced again during the 1960's and 1970's. Many contemporary studies report significant results in favor of full-day kindergarten. The present report discusses the results of research conducted during a 10-year period in rural, southern Minnesota. This research compared three attendance patterns: all-day everyday, half-day everyday, and all-day alternate day. The first three studies used the Metropolitan Readiness Test to compare class groups representing the three attendance patterns. A later study used this test to compare kindergarten classes 5 years apart in the same school districts. While the teachers and curriculum were the same, in one case the district had changed from all-day everyday attendance to all-day alternate day attendance. In another district, the change was from all-day alternate day attendance to half-day everyday attendance. It was concluded that, for the particular children studied, the all-day everyday kindergarten program was superior to both other attendance patterns. In addition, the half-day everyday program resulted in higher performance for children than did the all-day alternate day program. (CB)

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Should Kindergarten Children Attend School All Day Every Day?

Marjorie Oelerich

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Senate File 1333, introduced in the 1984 Minnesota Legislature, provided "for kindergarten pupils . . . enrolled in full day sessions throughout the school year or the equivalent thereof, and for other elementary pupils, one pupil unit." It appeared that the kindergarten would finally be recognized as being as valuable as the other elementary grades. The Bill failed to pass this session; it will be re-introduced.

Should kindergarten children attend school all day every day? A report of research conducted by this author in southern, rural Minnesota suggests that this might be a feasible attendance pattern.

Historically, the development of kindergarten reflects more concern with curriculum (or lack of curriculum), with chronological ages of children, with busing budgets and other factors, than with length or regularity of attendance day. In fact, even Froebel, grandfather of modern kindergartens, only briefly referred to the length of the kindergarten day.[1]

In its early existence in the United States, the kindergarten was a longer day. Gorton comments that "historically, kindergartens began as full-day programs. The half-day programs developed in response to the need to accommodate larger numbers of children."[2] Customarily, the extended day or the full day was typical for kindergarten children. Often these experiences were in rural one-room schools, where the youngest child attended the same length of day as any other child.

Apparently, World War II influenced a cut-back to half day kindergartens. With the shortage of teachers while the men were in the armed services, together with a shortage of classroom building space and an increased birth rate, most kindergartens became half day every day.

All day kindergartens surfaced again in the '60s and '70s. The U.S. Department of Health, Education and Welfare reported in the 1969-70 school year, 13.8% of children enrolled in kindergartens were attending full day.[3] Many of these programs were in Hawaii, which had had all day every day kindergartens since 1955.[4]

It must be noted that many other countries in the world have all day every day school for the child of kindergarten age, or even younger. Perhaps the best known is in Britain, where the "rising fives" attend kindergarten all day every day.[5]

Available contemporary research is not always clearly defined. Sometimes the investigation relates to only one attendance pattern in isolation: either all day every day or all day alternate day or half day every day or some other arrangement. Sometimes the research reports a comparison of two of these options. Rarely are three or more attendance patterns compared.

Mueller[6] reports evidence that at the end of Grade Three, all day kindergarten children evidenced greater achievement than others on a Grade Three reading test and Kuhlmann Anderson Verbal I.Q.

Shreveport, Louisiana, a participant in the 222 Selected Programs for the Right to Read, was reported in research indicating the all day kindergarten program, as one phase of that district-wide Continuous Progress Program in Reading, yielded effective reading results.[7]

As another of the 222 Selected Programs, Cincinnati, Ohio, reported similar findings. The all day every day kindergarten children shifted from the 44th to the 75th national percentile on the Boehm Test of Basic Concepts. I. Q. scores, measured on the PPVT, rose from 83.9 to 91.2, significant at .01 level of confidence.[8]

Nieman[9] presented a paper at the annual meeting of the American Educational Research Association which reported that at the end of grade two emperical longitudinal evidence indicated a positive relationship between test scores and the amount of time the child had experienced in prekindergarten and kindergarten programs

Lysiak and Evans[10] compared seven kindergarten curricula in relation to socioeconomic status (SES) and kindergarten attendance pattern. Full day programs were favored for the low SES children in all curricula. Children in the high SES measured higher on the full day proram in some, but not all, curricula.

The Minnesota Department of Education[11] reported research comparing half day every day with all day alternate day kindergartens. Children who attended daily had significantly higher scores on naming numbers one to nine and knowledge of the sounds of the letters of the alphabet.

In an effort to measure performance of kindergarten children attending one of three attendance patterns (all day every day [ADED], half day every day [HDED], all day alternate day [ADAD]), this investigator conducted studies during the past ten years in rural, southern Minnesota.

The original study, in 1974, involved kindergarten teachers who were graduate students of this author. Each of these teachers taught a class of kindergarten children representing one of the attendance patterns. The 1964 edition of the Metropolitan Readiness Test (Form B)[12] was administered in May of that year.

Table I reports the results of this portion of the study. The F ratio of 13.374 indicates statistically significant differences at the .05 level between the three groups. It is seen that the ADED group had the highest score (84.42) followed by the HDED (73.44) and the ADAD (66.73). In this instance, the all day every day kindergarten group scored significantly higher than the other two groups.

In 1979, the same three teachers participated in a follow-up study, in which the 1976 edition of the Metropolitan Readiness Test[13] was administered to the children. Pre-tests in September of the school year showed no significant difference between the groups. Post-tests in May are reported on Table II. The F ratio of .241 was not statistically significant at the .05 level. However, it is noted that the

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TABLE I: 1974 COMPARISON OF SCORES* OF KINDERGARTEN CHILDREN IN THREE ATTENDANCE PATTERNS

Attendance Pattern	Mean Score	S.D.
$ADED_{N=21}$	84.42	11.54
$HDED_{N=25}$	73.44	9.45
$ADAD_{N=19}$	66.73	12.16

$F_{(2,62)}$ 13.374

$F_{.05} \geq \approx$ 3.15

$F_{.01} \geq \approx$ 4.97

TABLE II: 1979 COMPARISON OF SCORES* OF KINDERGARTEN CHILDREN IN THREE ATTENDANCE PATTERNS

Attendance Pattern	Mean Score	S.D.
$ADED_{N=29}$	53.75	12.09
$HDED_{N=44}$	52.18	8.58
$ADAD_{N=15}$	51.60	16.08

$F_{(2,85)}$ .241

$F_{.05} \geq$ between 3.1504 and 3.0718

TABLE III: 1983 COMPARISON OF SCORES* OF KINDERGARTEN CHILDREN IN THREE ATTENDANCE PATTERNS

Attendance Pattern	Mean Score	S.D.
$ADED_{N=44}$	61.30	6.24
$HDED_{N=15}$	50.20	10.65
$ADAD_{N=15}$	51.60	16.08

$F_{(2,72)}$ 10.63

$F_{.05} \geq$ between 3.1504 and 3.0728

*Nurss, Joanne, et al, METROPOLITAN READINESS TEST, Level II, Form P, Harcourt Brace Jovanovich, 1976.

ADED had the highest score (53.75) compared with the HDED (52.18) and the ADAD (51.60).

Most recently, in May of 1983, a further study comparing the three attendance patterns was possible. Table III reports these results. It is seen that the all day every day is significant at the .05 level.

A further unique comparison became possible when two of the three school districts in the 1974 study decided to change their kindergarten attendance pattern by the time of the 1979 study. In one instance, the school district changed from all day every day to all day alternate day. In the other case, the school district changed from all day alternate day to half day every day. It must be noted that in these two instances, in an effort to make more finite comparisons, the 1964 edition of the MRT which had been used in 1974 was repeated with these children in 1979. Thus, many variables remained constant in May of 1974 and in May of 1979: The same school district, the same teacher, the same curriculum and the same standardized test. There were two differences: a different population of children and a different attendance pattern.

Table IV reports findings comparing one of these school districts. In 1974, this school district had all day every day kindergarten attendance; in 1979, the all day alternate day had been adopted. The F ratio of 20.112 is significant beyond the .01 level. The all day every day group scored significantly higher than the all day alternate day group.

Table V reports findings comparing the second of these school districts. In 1974, this school disrict had all day alternate day kindergarten attendance; in 1979, the half day

TABLE IV: 1974/1979 COMPARISON OF SCORES* OF KINDERGARTEN CHILDREN IN TWO ATTENDANCE PATTERNS: ADED WITH ADAD

ATTENDANCE PATTERN	MEAN SCORE	S.D.
1974 $ADED_{N=21}$	84.42	11.54
1979 $ADAD_{N=16}$	64.00	16.18

$F_{(1,35)}$ 20.112

$F_{.05} \geq$ 4.1709

$F_{.01} \geq \approx$ 7.50

*Hildreth, Gertrude, et al, METROPOLITAN READINESS TEST, Form B, Harcourt Brace and World, Inc., NY, NY, 1964.

TABLE V: 1974/1979 COMPARISON OF SCORES* OF KINDERGARTEN CHILDREN IN TWO ATTENDANCE PATTERNS: ADAD WITH HDED

ATTENDANCE PATTERN	MEAN	S.D.
1974 $ADAD_{N=19}$	66.73	12.16
1979 $HDED_{N=15}$	69.07	14.98

$F_{(1,32)}$ .251

$F_{.05} \geq$ 4.17

*Hildreth, Gertrude, et al, METROPOLITAN READINESS TEST, Form B, Harcourt, Brace and World, Inc., NY, NY, 1964.

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every day had been adopted. The F ratio of .251 is not significant at the .05 level. However, it must be noted that the mean score of the HDED in 1979 was higher than the mean score of the ADAD in 1974.

In summary, it appears that for these school districts, for these children, in these years reported, the ADED kindergarten attendance pattern is superior to the HDED or the ADAD program. Of the latter two, the HDED program resulted in higher performance for children than did the ADAD program.

Further study is needed in several aspects of this topic. Other populations of children in other types of school districts need to be evaluated. Longitudinal performance of children in the elementary and secondary grades must be measured. Actual financial costs must be audited, in order to consider not only the bus transportation but also to consider educational costs in terms of special referrals, retention of children, and other costs to the school district.

Footnote References

[1]Rasmusson, Margaret, **Readings from Childhood Education, Articles of Lasting Value**, Washington, D.C., Association for Childhood Education International, p. 277.

[2]Gordon, Harry B., **A Study of the Kindergarten Program: Full Day or Half Day?**, Penn-Trafford School District, Harrison City, Pa., 1968, p. 14. ED 017 327.

[3]Barker, Linda A., **Preprimary Enrollment**, October, 1971, U.S. Department of HEW, Pub. No. (OE) 72-197, p. 17.

[4]Gordon, op. cit., p.10.

[5]Tizard, Jack, **All Our Children**, London: Maurice Temple Smith/New Society, 1976.

[6]Mueller, E. Jana, **Effects of Entry Level and Pattern of Title I**, 1977. ED 151 419.

[7]Eden Gardens Kindergarten Program, **Effective Reading Programs: Summaries of 222 Selected Programs**, ED 106 835.

[8]Cincinnati Public Schools, Ohio, **All Day Kindergarten, ESEA Title I**, 1974. ED 108 143.

[9]Nieman, Ronald H., **Preschool Plus All Day Kindergarten**, 1975. ED 105 998.

[10]Lysiak, Fae and Charles Evans, **Kindergarten: Fun and Games or Readiness for First Grade: A Comparison of Seven Kindergarten Curricula**, 1976. ED 121 803.

[11]Minnesota State Department of Education, **Kindergarten Evaluation Study: Full Day Alternate Day Programs**, 1972. ED 070 529.

[12]Hildreth, Gertrude, et al., **Metropolitan Readiness Test**, Form E, Harcourt Brace and World, Inc., NY, NY, 1964.

[13]Nurss, Joanne, et al, **Metropolitan Readiness Test**, Level II, Form P, Harcourt Brace Jovanovich, Inc., 1976.

Additional Sources

Alper, Carol L., and Donald Wright, "Extended Day Kindergarten plus Parent Involvement: a Combination that Works," **Phi Delta Kappan** 61, September, 1979.

Barbato, Guy, "All-Day, Every-Day Kindergarten," **Early Years 11**, August/September, 1980.

Cieslukowski, William, **Full-Day Kindergarten Survey Report**, East Hampton, Conn.: Memorial Elementary School, June, 1981.

Cincinnati Public School System, **All Day Versus Half Day Kindergarten Report**, 1971.

Criscuolo, Nicholas, P., "Most of the Kinder Going to the Garten," **New Haven Register, School Forum Column**, March 21, 1982.

Egertson, Harriet A., "The All Day Kindergarten: What Happens There is What Counts," **Dateline, Education**, Lincoln: Nebraska Department of Education, 1981.

Elementary and Middle School Principals Association of Connecticut, "All Day Kindergarten," **Newform 5**, Summer, 1981.

Ferguson-Florissant School District, Ferguson, Mo., **Expanding Early Education: The Extended Day Kindergarten**, 1974. ED 107 367.

Herman, Barry E., **The Case for the All Day Kindergarten**, Phi Delta Kappa Educational Foundation, Bloomington, Ind., 1984.

Herman, Barry E., "All Day Kindergarten Works for Many Children," **New Haven Register**, February 21, 1983.

Hess, F., et al, **Kindergarten in American Education: A Discussion of Current Questions**, U.S. Educational Resources Information Center, 1978. ED 158 397.

Humphrey, Jack, **A Study of the Effectiveness of Full Day Kindergarten**, Evansville, Ind.: Evansville-Vanderburgh School Corp. 1980.

Humphrey, Jack, **A Longitudenal Study of the Effectiveness of the Full Day Kindergarten**, Evansvile, Ind.: Evansville-Vanderburgh School Corporation, 1982.

Jokubaitis, Thomas, **Planning for All Day Kindergarten: Report to Board of Education**, Stamford, Conn., 1980.

Johnson, Edith W., **An Experimental Study of the Comparison of Pupil Achievement in the All Day Kindergarten and One Half Day Control Group,** Ph.D. dissertation, Walden University, July, 1974.

Lake, Micheal, **Full Day Kindergarten Evaluation Report,** Davenport, Iowa: Davenport Community School District, July 1983.

Lake, Micheal, **Full Day Kindergarten Evaluation Report — An Up Date,** Davenport, Iowa: Davenport Community School District, August, 1984.

Naron, Nancy K., "The Need for Full Day Kindergarten," **Educational Leadership 38,** January, 1981.

Nieman, Ronald H., and Joseph F. Gastright, "The Long-Term Effects of Title I Preschool and All Day Kindergarten," **Phi Delta Kappan 63,** November, 1981.

Rhinelander, Wisconsin, Board of Education, **Report on All Day Kindergarten,** 1976.

Woods, Carol, et al., **Evaluation of the ESEA Title I, Part B, Pilot Kindergarten Program,** U.S. Educational Resources Information Center, 1977. ED 148 479.

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